

## **Effectiveness of Multi-channel Educational Interventions (Including Mass Media) With Increased Access to Promote Breast, Cervical and Colorectal Cancer Screening in Communities and Health Care Systems**

Mammography screening every 1 or 2 years is recommended for women age 40 and older. The benefits of regular mammography increase with age, whereas the possibility of harms from screening diminish from ages 40 to 70. So, the balance of benefits and harms grows more favorable as women age. The benefits of Papanicolaou (Pap) smear testing for women over 21 from screening for cervical cancer are also clear. The incidence of cervical cancer has decreased significantly during the last 40 years, in large part because of early detection. Periodic screening for colorectal cancer for men and women age 50 years and older is strongly recommended. Benefits from screening substantially outweigh potential harms. Several effective screening tests are available, including fecal occult blood testing, sigmoidoscopy, and colonoscopy. However, despite the existence of these tests, utilization rates are below recommended levels according to Healthy People 2010 objectives, especially among individuals in some minority groups and among low income individuals who may not have regular medical care. The question is then, what are effective strategies to promote increased use of breast, cervical and colorectal cancer screening?

Systematic reviews of published studies, conducted on behalf of the Task Force on Community Preventive Services by a team of experts, found that multi-channel educational interventions (including mass media) with increased access were effective in increasing screening for breast and cervical cancer. Based on these reviews, the Task Force issued recommendations to implement these efforts. On the other hand, no studies were found to address the role of multi-channel educational interventions (including mass media) with increased access in increasing colorectal cancer screening. The evidence was, therefore, considered insufficient to promote multi-channel educational interventions (including mass media) with increased access in colorectal cancer prevention and therefore recommended for further research. It is important to remember that **this finding does NOT mean this intervention does not work**, but rather indicates that additional research is needed to determine the effectiveness of these interventions.

### **Background on multi-channel educational interventions (including mass media) with increased access to promote breast, cervical and colorectal cancer screening**

- Multi-channel educational interventions (including mass media) with increased access disseminate information in communities and often to individuals about the benefits and availability of screening that will motivate populations to be screened.
- Multi-channel educational interventions (including mass media) with increased access to promote screening in communities using mass media and other interventions such as small media, small group education and one-on-one education.
- Multi-channel educational interventions (including mass media) with increased access should be applicable across a broad range of settings and populations assuming that the intervention is appropriately tailored to the population of interest.
- Increased access to promote screening utilizes interventions such as removal of structural barriers and cost reductions.

### **Findings from the systematic review**

#### **Search results:**

- 127 articles reviewed
- 97 studies included in one of the 6 intervention reviews conducted by the Task Force
- 17 qualifying studies
- A total of 25 studies were identified by the Task Force and eight were found to have limited quality and were therefore excluded from the review.
- There were 16 studies for breast cancer screening by mammography that were positive and statistically significant (median change=11.8%, mean=12.0, p<0.002).
- There were 17 studies for cervical cancer screening by Pap smear that were positive and statistically significant (median change=15.9%, mean=15.7, p<0.0001).
- There were no studies to address the effectiveness of multi-channel interventions (including mass media) with increased access in promoting colorectal cancer screening.
- Multi-channel interventions (including mass media) with increased access were effective in both rural and urban settings and among different ethnic and socioeconomic groups.

- Directions for future research:
  - What combinations of a smaller number of components are most effective?
  - What are the costs of multi-channel educational interventions (including mass media) in relation to the costs of increased access?
  - What are the minimum and maximum requirements for the duration and intensity of multi-channel educational interventions?

#### **What you can do with this finding**

- Use this finding and suggestions for improvement in research components along with information from [Cancer Control PLANET](#) to find local contacts and research tested programs that support implementation of recommended interventions or further research to address gaps in the evidence.

#### **Publications:**

- **MMWR/Recommendations and Reports** – Winter 2003.

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**The Guide to Community Preventive Services** (Community Guide) provides recommendations on population-based interventions to promote health and to prevent disease, injury, disability, and premature death, appropriate for use by communities and healthcare systems. For more information about the Community Guide (including links to publications and a variety of resources) see

[www.thecommunityguide.org](http://www.thecommunityguide.org) and for more information about Task Force findings on skin cancer prevention see

[www.thecommunityguide.org/cancer/](http://www.thecommunityguide.org/cancer/)

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